

CLAIMS

1. Multi-way adjustment device for adjusting a rest portion of a seat, comprising
a mounting plate (1),
an adjustment part (7) to be coupled with the rest portion of the seat which is
5 mounted so as to be displaceable relative to the mounting plate (1), and
an adjusting unit (6) for displacing the adjustment part (7) relative to the
mounting plate (1),
which adjustment part (7) is coupled with mechanical energy storage means
(5) in such a way that when the adjustment part (7) is displaced in a first
10 adjustment direction (A) relative to the mounting plate (1), mechanical energy
is absorbed by the mechanical energy storage means (5), whereas a
movement of the adjusting part (7) in a second adjustment direction (B)
relative to the mounting plate (1) is assisted by the release of mechanical
energy previously absorbed by the mechanical energy storage means (5).
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2. Multi-way adjustment device as claimed in claim 1,
characterised in that the first adjustment direction (A) is essentially opposite
to the second adjustment direction (B).
- 20 3. Multi-way adjustment device as claimed in claim 1,
characterised in that the adjusting unit (6) is electro-mechanically operated.
4. Multi-way adjustment device as claimed in claim 1,
characterised in that the adjustment part (7) comprises a first end portion (2)
25 to be coupled with the rest portion and a second end portion (4) to be
coupled with the mechanical energy storage means (5).
5. Multi-way adjustment device as claimed in claim 1,
characterised in that the mechanical energy storage means (5) are coupled

on the one hand with the adjustment part (7) and on the other hand with the mounting plate (1).

6. Multi-way adjustment device as claimed in claim 1,
5 characterised in that the mechanical energy storage means has at least one resiliently elastic element (5) which absorbs mechanical energy when the adjustment part (7) is displaced in the first adjustment direction (A) and releases mechanical energy when the adjustment part (7) is adjusted in the second adjustment direction (B).

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7. Multi-way adjustment device as claimed in claim 6,
characterised in that the at least one resiliently elastic element (5) is designed and disposed so that it is tensioned as the adjustment part (7) is displaced in the first adjustment direction (A) and relaxed when the
15 adjustment part (7) is displaced in the second adjustment direction (B).

8. Multi-way adjustment device as claimed in claim 5,
characterised in that the mechanical energy storage means comprises two resiliently elastic elements (5), one of which resiliently elastic elements (5) is
20 disposed along a longitudinal side of the adjustment part (7).

9. Multi-way adjustment device as claimed in claim 4,
characterised in that the at least one resiliently elastic element (5) is coupled on the one hand with the second end portion (4) of the adjusting part (7) and
25 on the other hand with the mounting plate (1).

10. Multi-way adjustment device as claimed in claim 1,
characterised in that the adjusting part (7) is of an elongate design with a middle portion (3) disposed between a first end portion (2) and a second end
30 portion (4) and the adjusting part (7) is mounted so as to be displaceable on

the mounting plate by means of the middle portion (3).

11. Multi-way adjustment device as claimed in claim 10,
characterised in that the first and second end portions (2, 4) of the
5 adjustment device (7) have a bigger width than the middle portion (3).

12. Seat with a multi-way adjustment device as claimed in claim 1 for
adjusting a rest portion of a seat.

10 13. Use of a multi-way adjustment device as claimed in claim 1 for
adjusting the rest width of a seat.

14. Adjustment device for a cable pull,
with a housing (7), which cable pull (11, 12) is mounted so as to be
15 displaceable relative to the housing (7), and
having an adjusting unit (6) for displacing the cable pull (11, 12) relative to
the housing (7),
characterised in that
the cable pull (11, 12) is coupled with mechanical energy storage means (5)
20 so that when the cable pull (11, 12) is displaced in a first adjustment direction
(A), mechanical energy is absorbed by the mechanical energy storage
means (5), whereas a displacement of the cable pull (11, 12) in a second
adjustment direction (B) is assisted by the release of mechanical energy
previously stored by the mechanical energy storage means (5).

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15. Adjustment device as claimed in claim 14,
characterised in that the cable pull is provided in the form of a Bowden wire
and comprises a wire (12) mounted so as to be displaceable in a sleeve (11),
30 which wire (12) is coupled with the mechanical energy storage means (5).

16. Adjustment device as claimed in claim 15,
characterised in that the sleeve (11) is supported on the housing (7) of the
adjustment device and the wire (12) is guided in the interior of the housing
(7), where it is coupled with the mechanical energy storage means (5).

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17. Adjustment device as claimed in claim 15,
characterised in that the first adjustment direction (A) corresponds to a
slackening of the Bowden wire and the second adjustment direction (B)
corresponds to a tensioning of the Bowden wire.

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18. Adjustment device as claimed in claims 14,
characterised in that the adjusting unit (6) is electrically operated.

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19. Adjustment device as claimed in claim 14,
characterised in that the adjusting unit (6) can be manually operated.

20. Adjustment device as claimed in claim 14,
characterised in that the mechanical energy storage means are coupled with
the housing (7) of the adjustment device.

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21. Adjustment device as claimed in claim 14,
characterised in that the mechanical energy storage means comprise at least
one resiliently elastic element (5) which absorbs mechanical energy when the
cable pull (11, 12) is displaced in the first adjustment direction (A) and
releases mechanical energy when the adjustment part (7) is displaced in the
second adjustment direction (B).

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22. Adjustment device as claimed in claim 21,
characterised in that the at least one resiliently elastic element (5) is
designed and disposed so that it is tensioned when the cable pull (11, 12) is
displaced in the first adjustment direction (A) and relaxed when the cable pull

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(11, 12) is displaced in the second adjustment direction (B).

23. Lumbar support comprising a Bowden wire coupled therewith and an adjustment device as claimed in claim 14 coupled with the Bowden wire for
5 adjusting the lumbar support by displacing the Bowden wire.

24. Use of an adjustment device as claimed in claim 14 for adjusting a lumbar support.